

Appl. No. 10/749,045
Amdt. Dated January 2, 2007
Reply to Office Action of October 3, 2006

REMARKS

The above Amendments and these Remarks are in response to the Office Action mailed October 3, 2006. Applicant has amended claims 1, 8-10, and 16 to more explicitly and correctly express the present invention. The amendments to claims 1 and 10 are supported, e.g., claim 20 and FIG. 1 of the original specification. No new matter is added.

Applicant appreciates the Examiner's careful review and consideration of the present application.

Claim Rejections Under 35 U.S.C. 102

Claims 10, 11 and 13-19 are understood as being rejected under 35 U.S.C. 102(e) as being anticipated by Nishigaki (US 6,776,931).

In response to the rejection of claim 10, Applicant has amended claim 10 and hereby otherwise transverses this rejection. As such, Applicant submits that amended claim 10 is novel, unobvious and patentable over Nishigaki and the other cited reference, taken alone or in combination.

Claim 10, as currently amended, recites in part:

"a second plate having a side wall opposite to the side wall of the first plate, the side wall of the second plate being non-parallel to the side wall of the first plate;

a cavity for molding a light guide plate defined between the first plate and the second plate, the cavity being one of a wedge shape and a papilionaceous shape in cross-section; and

a fluid passageway provided in the first plate for cooling and solidifying molten resin injected into the cavity;

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wherein the fluid passageway is arranged in a plane non-parallel with the side wall of the first plate and parallel with the side wall of the second plate." (Emphasis added.)

Applicant submits that such a mold as set forth in claim 10, is neither taught, suggested or disclosed by Nishigaki or any other cited references, taken alone or in combination at least for the following reasons:

Nishigaki presents a mold wherein the plurality of fluid passageways 29 (labeled in FIG. 3) are arranged in a plane, in a parallel manner with regard to a side wall of the cavity plate 28. However, the present mold, as set forth in claim 10, requires that "the fluid passageway is arranged in a non-parallel plane with the side wall of the first plate and parallel with the side wall of the second plate." Specifically, Nishigaki only discloses or suggests having the **fluid passageways 29, the fluid passageways 29 and the opposing cavity plates 28 to all be aligned parallel with one another** (e.g., Fig. 3). Even in a situation in which a wedge shape is to be produced, Nishigaki does not particularly disclose or suggest that any of the fluid passageways 29 would be parallel to one cavity plate 28 but not the other one. As such, Nishigaki clearly does not disclose or suggest the present mold, as set forth in claim 10.

Therefore, it is submitted that any combination of Nishigaki with any one or more of the other cited reference (including Choi et al.) does not teach or suggest the mold as set forth in claim 10.

For at least the above reasons, Applicant submits that the amended claim 10 is novel, unobvious and patentable under both 35 U.S.C. §102(e) and 35 U.S.C. §103 over Nishigaki and the other cited reference. Reconsideration and removal of the rejection of claim 10 are respectfully requested.

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Claims 11, 13-19 depend directly or indirectly on amended claim 10, which is asserted to be in condition for allowance under §102 and §103 as detailed above. Accordingly, Applicant submits that claims 11, 13-19 are also novel, unobvious and patentable under both 35 U.S.C. §102(e) and 35 U.S.C. §103 over Nishigaki and the other cited reference.

Claim Rejections Under 35 U.S.C. 103

Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki (US 6,776,931). Claims 1-9 are rejected under U.S.C. 103(a) as being unpatentable over Nishigaki in view of Choi et al (US 6,699,409).

In response to the rejection of claim 12, claim 12 directly depends on the amended claim 10, which is asserted to be in condition for allowance under §102 and §103 over Nishigaki for the reasons set forth above. Accordingly, dependent claim 12 should also be patentable.

In response to the rejection of claim 20, Applicant respectfully traverses this rejection and submits that claim 20 is unobvious over Nishigaki or any other cited reference, taken alone or in combination, and thus should be allowed.

Claim 20, as originally filed, recites in part:

“said plurality of passageways are arranged in a plane with regard to the oblique side wall in a non-parallel manner.”
(emphasis added)

Regarding this subject matter, the Examiner contended that “although Nishigaki shows the mold cavity as being rectangular, clearly wedge-shaped plates are conventional and well known and mold cavities would therefore have been obviously made wedge-shaped to mold them... The cooling

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passageways shown in Figure 3 would then be arranged in a plane with regard to the oblique side wall in a non-parallel manner.” Applicant, however, submits that the Examiner fails to set up a *prima facie* obviousness case against the present method for making a light guide plate, as set forth in claim 20, for at least the following reasons:

Nishigaki teaches a mold wherein the fluid passageways 29 (labeled in FIG. 3) are arranged in a plane parallel to the side wall of the cavity plate 28. Consistent with the argument presented above with respect to claim 10, even in a situation in which a wedge shape is to be produced, Nishigaki does not particularly disclose or suggest that any of the fluid passageways 29 would be non-parallel to an oblique side wall. Essentially, Nishigaki fails to teach or suggest the subject matter of claim 20.

Further, even the references can be modified to produce a wedge-shaped light guide plate, Nishigaki does not render the resultant modification obvious because Nishigaki fails to suggest the desirability of the modification. As stated in MPEP §2143.01, “the prior art must suggest the desirability of the claimed invention”, “fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness”, and “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” Specifically, no motivation is provided to specifically align the passageways non-parallel to an oblique side wall, as per claim 20.

In summary, Nishigaki fails to teach or suggest the method as recited in claim 20. For failing to teach, disclose or suggest each and every limitation of the present method, as set forth in claim 20, Nishigaki should not be taken as rendering obvious the present method as set forth in claim 20. Claim 20 should be allowable.

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Claims 1 is rejected under U.S.C. 103(a) as being unpatentable over Nishigaki in view of Choi et al.

In response to the rejection of claim 1, Applicant respectfully traverses this rejection and submits that claim 1 is patentable over Nishigaki in view of Choi et al., and thus should be allowed.

Similarly, claim 1, as amended, recites in part:

“wherein the side wall of the first plate faces the side wall of the second plate in a non-parallel manner,

...
cooling the molten resin so that it solidifies by means of a refrigerant filled in a fluid passageway, wherein the fluid passageway is provided in the first plate, and is arranged in a plane with regard to the side wall of the first plate in a non-parallel manner and with regard to the side wall of the second plate in a parallel manner.” (emphasis added)

As set forth in the arguments with respect to claims 10 and 20, Nishigaki fails to teach or suggest the method as recited in claim 1. Therefore, though Choi et al discloses or suggests an injection rate of 1-10,000 cm²/sec, still claim 1 should be patentable over Nishigaki in view of Choi et al., since Choi et al. is unable to overcome the shortcomings of Nishigaki with respect to claim 1. Claim 1, along with claims 2-9 depending therefrom, accordingly should be allowable.

In view of the above claim amendments and remarks, the subject application is believed to be in a condition for allowance, and an action to such effect is earnestly solicited.

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Respectfully submitted,

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